

# **COVID-19 Health Alert Levels:**

Interim Criteria for Determining Health Alert Levels and Movement between Health Alert Levels

# **GOAL**

Southwest District Health (SWDH) aims to:

Mitigate the rapid spread of COVID-19 disease and related morbidity and mortality by:

- Reducing or maintaining the the basic reproduction number of the virus (R0) to well below 1.0. The R0 is the expected number of cases directly generated by one case in a population susceptible to infection.
- Preventing first responders, healthcare workers, and healthcare systems from being overwhelmed by surges.
- Maintaining personal protective equipment (PPE) supplies for our region.

## **DETERMINING HEALTH ALERT LEVELS**

## **QUANTITATIVE DATA**

# **Syndromic**

- Emergency room utilization by individuals with COVID-like illness
- Number of persons under monitoring (these are people who have been exposed to COVID-19, but to date have not developed symptoms)

# Epidemiologic

- Confirmed and probable new daily cases per 10,000 population (seven-day rolling average)
- Number of congregate care facilities with COVID-19 cases currently under investigation, monitoring, or testing
- Preliminary case fatality ratio attributed to COVID-19 and mortality rate of individuals infected with COVID-19
- Percent of new COVID-19 cases traced to a known source

- Average follow up time for new COVID-19 investigations
- Percent of individuals diagnosed with COVID-19 who were symptomatic

# Healthcare

- Hospitalization rate of individuals with COVID-19
- Positive Test Ratio (number of positive tests / number of tests administered) Number of healthcare workers sick with COVID-19; number of workers not working due to illness and quarantine

#### **QUALITATIVE DATA**

Healthcare: Concerns raised by organizations (e.g., long-term care facilities, hospitals, or first responders) regarding COVID-19 observations and trends, ability or capacity to respond, and/or ability to secure necessary PPE or other medical resources.

Local Elected Officials: Concerns raised by town, city, or county elected officials on behalf of their constituents regarding impacts to health, safety, well-being and community vitality.

*Epidemiologic:* Descriptive data on incidence of new cases, cluster outbreaks, and levels of community transmission within defined geographic areas (e.g., city, sub-region, county).

Educators: Close contacts, cases and cluster outbreaks associated with schools and/or school-related-activities.

# **GEOGRAPHIC BOUNDARIES**

Health Alert Levels will be established for each county. The current rate per 10,000 population will also be established using zip code or census tract data. Southwest District Health includes:

- Adams County
- Canyon County
- Gem County
- Owyhee County
- Payette County
- Washington County

## **COVID-19 HEALTH ALERT LEVELS**

COVID-19 Health Alert Levels are intended to be an education tool to inform the public of activities that increase risk for exposure to disease and to communicate what the risk for exposure is in the local community (i.e., hot spots) across the six-county region. Criteria for assigning a health alert level to a specific geographic area (e.g., zip code, census tract or county) are described on pages 4-5.

COVID-19 HEALTH ALERT LEVEL RED	COVID-19 HEALTH ALERT LEVEL  ORANGE	COVID-19 HEALTH ALERT LEVEL YELLOW	COVID-19 HEALTH ALERT LEVEL  GRAY
HIGH	MEDIUM	LOW	ROUTINE
RISK OF	RISK OF	RISK OF	RISK OF
EXPOSURE	EXPOSURE	EXPOSURE	EXPOSURE

# **COVID-19 METRICS TO INFORM SWDH HEALTH ALERT LEVELS**

Indicator	Gray	Yellow	Orange	Red
Number of new cases (confirmed and probable): Newly daily cases per 10,000 population*	<1 daily new cases per 10,000 pop. OR Number of new cases occur sporadically (>14 days apart)	1 – 2.5 daily new cases per 10,000 pop. OR Number of new cases occur sporadically.	2.5 – 5 daily new cases per 10,000 pop. OR Number of new cases occur < 14 days apart	> 5 daily new cases per 10,000 pop. OR Number of new cases occur < 7 days apart.
Hospitalization Rate of individuals with COVID-19*	<5% of individuals with COVID-19 are hospitalized	<10% of individuals with COVID-19 are hospitalized	10-15% of individuals with COVID-19 are hospitalized	>15% of individuals with COVID-19 are hospitalized
Emergency department (ED) utilization by individuals with COVID-like illness	No reported ED utilization data from the population, OR sporadic visits (>14 days apart), AND visits are imported or associated with an exposure within a household	Low-volume visits (day(s) between visits or <5 visits/day), OR visits are imported or associated with an exposure within a household or shared living space	Elevated ED visits (daily visits or <10 visits/day)	Elevated ED visits (daily visits or >10 visits/day)
Preliminary case fatality ratio attributed to COVID- 19 and mortality rate of individuals infected with COVID- 19*	<0.5% of COVID-19 cases result in death.	>0.5% of COVID-19 cases result in death.	>1% of COVID-19 cases result in death.	>2% of COVID-19 cases result in death.
Number of congregate care facilities with COVID-19 cases currently under investigation, monitoring, or testing. (Congregate Care Facilities include LTCFs, correctional institutions, foster homes, treatment facilities).	No long-term care facilities have cases under investigation, monitoring, or testing OR A case is imported, but no additional cases are reported within the facility following 14 days since last exposure	No long-term care facilities have cases under investigation, monitoring, or testing OR A case is imported, but no additional cases are reported within the facility following 14 days since last exposure	One or more long-term care facilities have a case(s) under investigation, monitoring, or testing OR Disease transmission is occurring within a facility but contained to one area/unit/hall	One or more long-term care facilities have a case(s) under investigation, monitoring, or testing OR Uncontained disease transmission is occurring within a facility
Number of healthcare workers sick with COVID-19*	No reported cases in healthcare workers, OR confirmed imported case in a healthcare worker, OR healthcare worker was exposed to a household member that imported the disease	< 1 reported case/day in healthcare workers	< 2 reported cases/day in healthcare workers	> 2 reported cases/day in healthcare workers, OR consideration being given to implement Crisis Standards of care due to healthcare worker shortage

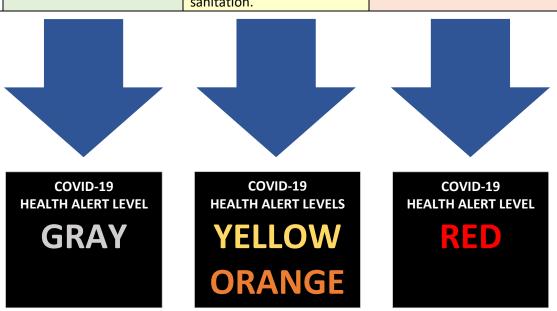
Indicator	Gray	Yellow	Orange	Red
Percent of new COVID-19 cases traced to a known source*	90% of cases traced to a known source	<85% of cases traced to a known source	<75% of cases traced to a known source	<70% of cases traced to a known source
Average follow up time for new COVID- 19 investigations	<8 hours (within the same business day)	<8 hours (within the same business day)	24 hours (on average)	>24 hours (on average)
Percent of individuals diagnosed with COVID-19 that were symptomatic	80%	>80%	>85%	>90%
Positive test ratio (number of positive tests / number of tests administered)*	<5%	5-8%	8-10%	>10%
Healthcare industry input*	No concerns raised by a healthcare industry (e.g., long-term care facilities, hospitals, or first responders) regarding their observations, ability or capacity to respond, or ability to secure necessary PPE or other medical resources.	Minor concerns raised by a healthcare industry (e.g., long-term care facilities, hospitals, or first responders) regarding their observations, ability or capacity to respond, or ability to secure necessary PPE or other medical resources.	Elevated concern by a healthcare industry (e.g., long-term care facilities, hospitals, or first responders) regarding their observations, ability or capacity to respond, or ability to secure necessary PPE or other medical resources	Healthcare industry (e.g., long-term care facilities, hospitals, or first responders) are enacting Crisis Standards of Care (or) are unable to respond or secure necessary PPE or other medical resources
Local elected official input	No concerns raised by town, city, or county elected officials on behalf of their constituents regarding impacts to health, safety, well-being, and community vitality.	Minor concerns raised by town, city, or county elected officials on behalf of their constituents regarding impacts to health, safety, well-being, and community vitality	Elevated concerns raised by town, city, or county elected officials on behalf of their constituents regarding impacts to health, safety, well-being, and community vitality.	Extreme concerns raised by town, city, or county elected officials on behalf of their constituents regarding impacts to health, safety, well-being, and community vitality.
Epidemiologists' input*	descriptive data indicate limited risk of importing COVID-19 to a specific geographic area or sporadic cases are identified with no clusters reported.	descriptive data indicate sporadic imported cases, occasional close contact transmission, and/or single or isolated cluster outbreaks. Citizens are actively taking precautions to mitigate the spread of COVID-19	Descriptive data indicate sporadic community spread, occurring at lesser rates. Some cluster outbreaks occur in workplace or in essential social settings (grocery stores, within households, etc.).	Descriptive data indicate sustained community spread and/or widespread outbreaks. Large social events resulting in cluster outbreaks are reported.
Educator's Input	No schools have cases under investigation or monitoring	No schools have cases under investigation or monitoring OR a case is imported, but no additional cases are reported within the facility following 14 days since last exposure.	One or more schools have a case(s) under investigation or monitoring OR recommended safety measure and PPE are not being utilized	One or more schools have a case(s) under investigation or monitoring OR one or more schools has uncontained COVID-19 transmission.

<sup>\*</sup> Indicates a primary metric used to determine a health alert level. Other secondary metrics are taken into consideration when assigning a health alert level.

# **CROSSWALK FOR SCHOOLS**

<u>Idaho Back to School Framework</u> has identified three categories for determining transmission risk (table below). To assist schools located in the six-county region, Southwest District Health has cross-walked the *Idaho Back to School Framework* with the COVID-19 Health Alert Level advisory system.

"Identify Level of Transmission Risk"			
	Category 1:	Category 2:	Category 3:
	No Community	Minimal to Moderate	Substantial Community
	Transmission	Community Transmission	Transmission
Definitions	Evidence of isolated cases, case investigations underway, no evidence of exposure in large communal setting, e.g., healthcare facility, school, mass gathering.	Widespread and/or sustained transmission with high likelihood or confirmed exposure within communal settings, with potential for rapid increase in suspected cases.	Large-scale community transmission, healthcare staffing significantly impacted, multiple cases within communal settings like healthcare facilities, schools, mass gatherings, etc.
Level of Operations	School buildings open with physical distancing and sanitation.	School buildings open but option of limited/staggered use of school buildings with physical distancing and sanitation.	Targeted, short-term, or extended building closure.



### **MOVEMENT BETWEEN HEALTH ALERT LEVELS**

The Movement Between Health Alert Levels is used in conjunction with Determining Health Alert Levels. Southwest District Health will use these data points to establish Health Alert Levels, determine when to move from one Health Alert Level to another, and provide information, guidance, and recommendations to the residents and businesses of the six-county region.

#### CRITERIA FOR MOVING BETWEEN LEVELS

# **Epidemiology:**

- New confirmed case trend: using calculated new daily cases per 10,000 population (seven-day rolling average); + trend direction and rate (stratified by census tract and county)
- Estimated death trend: New daily deaths per 10,000 population \*100 (assuming benchmark 1-1.5% case fatality rate) (seven-day rolling average); + trend direction and rate (stratified by census tract and county)
- New daily hospitalizations per 10,000 population (seven-day rolling average); + trend direction and rate (stratified by census tract and county)

# **Response Capacity:**

- Testing, tracing, and monitoring (TTM)
- Use of other non-pharmaceutical interventions (e.g., social/physical distancing, face covers)
- Therapeutic capacity (e.g., hospital beds, ICU beds, ventilators, healthcare workforce)
- Protection capacity (capacity to identify and meet the needs of vulnerable populations (e.g., homeless, elderly, first responders))
- Disease surveillance capacity (e.g., funding and staffing for epidemiologists, contract tracers, and health monitors)

#### TIMELINE FOR MEASUREMENTS

Data will be posted to the SWDH Tableau Dashboard each Monday through Friday, by 5pm (MST).

Health Alert Level assessments will be made on Wednesdays based on the prior two weeks' data (assessing 7-day averages of quantitative data points), starting on a Sunday and ending on a Saturday. At least two full weeks will be spent in a Health Alert Level before determinations to move to a lower less severe level (e.g., from High to Medium).

# DETERMINATIONS TO MOVE TO A HIGHER ALERT LEVEL MAY BE MADE AT ANY TIME IF ANY OF THE CRITERIA BELOW ARE MET:

- Crisis standards of care are implemented
- Senior leadership at a local hospital indicates that further increases in cases in the community will overwhelm local hospital capacity
- Epidemiologic evidence of a new or emerging significant risk to the public's health

These COVID levels (see table below) provide a roadmap that helps decision-makers and community members know where they are and what mitigation strategies may be appropriate based on their community's level of disease spread. The gray level aligns with the CDC's low incidence plateau threshold. The levels communicate the intensity of effort needed for control of COVID at varying levels of community spread. In addition to paying attention to the levels, decision-makers should pay close attention to direction of trend and rate of change. While jurisdictions may plateau in yellow, in the orange level viral spread tends to have more velocity.

COVID Health	Corresponding Community Mitigation Strategies		
Alert Level Red	At the red level, communities have reached a tipping point for uncontrolled spread.		
(High)	Southwest District Health <i>may</i> institute:		
>5 daily new cases per	<ul> <li>education, information, and messages, AND/OR</li> </ul>		
10,000 people*	<ul> <li>recommendations for use of face coverings, AND/OR</li> </ul>		
	<ul> <li>recommendations for 1 person per 64 square feet of space at events, AND/OR</li> </ul>		
	<ul> <li>recommendations for remote work when available, AND/OR</li> </ul>		
	<ul> <li>recommendations to vulnerable populations to limit participation in high-risk for</li> </ul>		
	exposure activities like some team sports or activities requiring close contact (e.g.,		
	football, basketball, dancing, choir), attending events where physical distancing		
	cannot be maintained (e.g., general admission concerts and other public entertainment events), family or social gatherings that bring people together		
	from different households, AND/OR		
	<ul> <li>recommendations limited visitation to long term care and correctional facilities.</li> </ul>		
Orange	At orange levels, community spread has accelerated. Southwest District Health may		
(Medium)	institute:		
2.5-5 daily new cases per	education, information, and messages, AND/OR		
10,000 people*	recommendations for 1 person per 64 square feet of space at events, AND/OR		
	recommendations for use of face coverings, AND/OR		
	recommendations to vulnerable populations to limit participation in high-risk for		
	exposure activities like some team sports or activities requiring close contact (e.g., football, basketball, dancing, choir), attending events where physical distancing		
	cannot be maintained (e.g., general admission concerts and other public		
	entertainment events), family or social gatherings that bring people together from		
	different households.		
Yellow	At yellow levels, there may be sporadic imported cases, uptick in close contact		
(Low)	transmission, or isolated cluster outbreaks. Southwest District Health <i>may</i> institute:		
1-2.5 daily new cases per	education, information, and messages		
10,000 people*	recommendations for 1 person per 64 square feet of space at events, AND/OR		
Gray	<ul> <li>recommendations for use of face coverings.</li> <li>At the gray level, communities are on track for containment so long as they maintain</li> </ul>		
(Routine)	routine levels of viral testing (i.e., this is not a reference to antibody testing) and contact		
<1 daily new cases per	tracing, sufficient to control spikes and outbreaks. Viral testing should be used both for		
10,000 people*	symptomatic and asymptomatic individuals, with the latter needed to detect cases flowing		
	from exposure, and to routinely screen for infections in congregate settings and other		
	critical context scenarios (e.g., elective surgery, hospital admission without symptoms		
	suggestive of COVID-19, etc.), or as requirements of disease surveillance programs.		

<sup>\*</sup> The 7-day daily average incidence of new case range will be used along with other data thresholds to make decisions when considering moving between health alert levels and will not be used as a single indicator/cutoff/trigger to move to a higher or lower level.

# **REFERENCES**

An Approach for Monitoring and Evaluating Community Mitigation Strategies for COVID-19. CDC. June 20, 2020. <a href="https://www.cdc.gov/coronavirus/2019-ncov/php/monitoring-evaluating-community-mitigation-strategies.html">https://www.cdc.gov/coronavirus/2019-ncov/php/monitoring-evaluating-community-mitigation-strategies.html</a>

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SERVING ADAMS - CANYON - GEM - OWYHEE - PAYETTE - WASHINGTON COUNTIES

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